

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

JUL 28 2015

REPLY TO THE ATTENTION OF:

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Julie Lowry
Environmental, Health, and Safety Director
The Electrolizing Corporation of Ohio
1325 East 152nd Street
Cleveland, Ohio 44112

Re:

Finding of Violation

The Electrolizing Corporation of Ohio

Cleveland, Ohio

Dear Ms. Lowry:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to the Electrolizing Corporation of Ohio (you) under Section 113(a)(3) of the Clean Air Act (the CAA), 42 U.S.C. § 7413(a)(3). We find that you have violated Section 112 of the CAA, 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R. Part 63, Subpart N, the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, at your Cleveland, Ohio facility.

Section 113 of the CAA gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, the efforts you have taken to comply, and the steps you will take to prevent future violations. In addition, to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Ray Cullen. You may call him at (312) 886-0538 to request a conference. You should make this request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak

Director

Air and Radiation Division

Enclosure

cc: George Baker, Cleveland Department of Public Health Robert M. Peachey (C-14J) (by email)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)	
The Electrolizing Corporation of Ohio Cleveland, Ohio) FINDING OF VIOLATI	ON
Cieveland, Omo) EPA-5-15-OH-19	
Proceedings Pursuant to)	
Section 113(a)(3) of the	·)	
Clean Air Act, 42 U.S.C.)	
§ 7413(a)(3))	

FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that the Electrolizing Corporation of Ohio (ECO) violated Section 112 of the Clean Air Act (CAA), 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R. Part 63, Subpart N, the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Subpart N), at its Cleveland, Ohio facility, as follows:

Statutory and Regulatory Background

- 1. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), authorizes EPA to promulgate regulations for particular industrial sources that emit one or more of the hazardous air pollutant (HAPs) listed in Section 112(b) of the CAA, 42 U.S.C. § 7412(b), in significant quantities.
- 2. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), EPA promulgated Subpart N on January 25, 1995. See 60 Fed. Reg. 4,948 (Jan. 25, 1995). On September 19, 2012, EPA amended Subpart N by, among other things, lowering the emission limitations in 40 C.F.R. § 63.342. 77 Fed. Reg. 58,220 (Sept. 19, 2012).
- 3. Pursuant to 40 C.F.R. § 63.340(a), Subpart N applies, in part, to each chromium electroplating tank at facilities performing hard chromium electroplating.
- 4. Subpart N, at 40 C.F.R. § 63.341(a), defines "hard chromium electroplating" as the process by which a thick layer of chromium (typically 1.3 to 760 microns) is electrodeposited on a base material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, and corrosion resistance.

¹ The citations in this Finding of Violation (FOV) reflect the regulations in effect before the September 19, 2012, amendments.

- 5. Subpart N, at 40 C.F.R. § 63.342(a), provides that each owner or operator of an affected source subject to the provisions of Subpart N shall comply with the requirements of Subpart N on and after the compliance dates specified in 40 C.F.R. § 63.343(a).
- Subpart N, at 40 C.F.R. § 63.342(b)(1), states, in part, that the emission limitations in 40 C.F.R. § 63.342 apply during tank operation, which Subpart N defines as the time in which current and/or voltage is being applied to a chromium electroplating tank or a chromium anodizing tank, and during periods of startup and shutdown. See 40 C.F.R. § 63.341(a).
- 7. Subpart N, at 40 C.F.R. § 63.342(b)(2), states that for a group of tanks with a common add-on air pollution control device, the emission limitations in 40 C.F.R. § 63.342 apply whenever any one affected source is operated.
- 8. Subpart N, at 40 C.F.R. § 63.342(f)(1)(i), states that owners or operators of an affected source subject to the emission limitations in 40 C.F.R. § 63.342 shall at all times, including periods of startup, shutdown, and malfunction, operate and maintain that source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices.
- 9. Pursuant to Subpart N, at 40 C.F.R. § 63.343(a)(2), the owner or operator of a hard chromium electroplating tank that had an initial startup after January 25, 1995 shall comply with the emission limitations in 40 C.F.R. § 63.342 immediately upon startup of the source.
- 10. Subpart N, at 40 C.F.R. § 63.343(c)(1)(i), requires that the owner or operator of an affected source, or a group of affected sources under common control, complying with the emission limitations in 40 C.F.R. § 63.342 through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in 40 C.F.R. § 63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the system during the initial performance test, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in 40 C.F.R. § 63.344(d)(5). An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± 2 inches of water column from this value as the compliant range.
- Subpart N, at 40 C.F.R. § 63.341(a), defines "composite mesh-pad system" as an add-on air pollution control device typically consisting of several mesh-pad stages. The purpose of the first stage is to remove large particles. Smaller particles are removed in the second stage, which consists of the composite mesh pad. A final stage may remove any reentrained particles not collected by the composite mesh pad.
- 12. Subpart N, at 40 C.F.R. § 63.343(c)(1)(ii), requires that, on and after the date on which the initial performance test is required to be completed under 40 C.F.R. § 63.7, the owner

or operator of an affected source, or a group of affected sources under common control, shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

- 13. Subpart N, at 40 C.F.R. § 63.340(b), requires that the owners or operators of affected sources subject to the provisions of Subpart N shall comply with the requirements of Subpart A of this 40 C.F.R. Part 63 (General Provisions), according to the applicability of the General Provisions to such sources, as identified in Table 1 of Subpart N.
- 14. Table 1 of Subpart N lists 40 C.F.R. § 63.4 of the General Provisions as applicable to Subpart N.
- 15. The General Provisions, at 40 C.F.R. § 63.4(a)(1), require that no owner or operator subject to the provisions of 40 C.F.R. Part 63 shall operate any affected source in violation of its requirements.

Findings of Fact

- 16. ECO owns and operates a metal finishing facility at 1325 East 152nd Street, Cleveland, Ohio (the facility), where it conducts, as relevant to this FOV, "hard chromium electroplating," as that term is defined at 40 C.F.R. § 63.341(a).
- 17. The facility consists of four existing hexavalent chromium electroplating tanks subject to Subpart N, which ECO installed in 1997: Tanks C51, C52, C53, and C54.
- 18. Emissions from tanks C51, C52, and C53 vent to a common three-stage "composite mesh-pad system," (System 1) as that term is defined in 40 C.F.R. § 63.341(a). Tank C54 is equipped with its own composite mesh-pad system (System 2).
- 19. On November 19, 2014, EPA inspected the facility for compliance with Subpart N, among other things.
- 20. Shortly after the inspection, ECO provided EPA with reports of performance testing conducted in 1997 and 2005 of the chromium electroplating tanks to establish a range of compliant pressure drop values for Systems 1 and 2 that correspond to compliance with the applicable emission limit in Subpart N.
- 21. ECO determines the pressure drop across each system by summing the pressure drop across each of the three stages of the system.

- 22. On 41 days from January 28, 2014, to March 27, 2014, ECO operated Tanks C51, C52, and C53 when one of the lines for the third stage of System 1 was frozen and unable to generate a pressure drop reading.
- 23. On 55 days from January 2, 2012 to March 19, 2012, ECO operated Tank C54 when System 2 could not generate a pressure drop reading due to the mesh pad lines having been crushed by construction of a new roof.

Violations

- 24. ECO failed to monitor and record the pressure drop across System 1 once each day that Tanks C51, C52, or C53 was operating, in violation of 40 C.F.R. §§ 63.4(a)(1), 63.342(a), and 63.343(c)(1)(ii).
- 25. ECO failed to monitor and record the pressure drop across System 2 once each day that Tank C54 was operating, in violation of 40 C.F.R. §§ 63.4(a)(1), 63.342(a), and 63.343(c)(1)(ii).
- 26. ECO failed to operate and maintain Tanks C51, C52, and C53 and System 1 in a manner consistent with good air pollution control practices, in violation of 40 C.F.R. §§ 63.4(a)(1), 63.342(a), and 63.342(f)(1)(i).
- 27. ECO failed to operate and maintain Tank C54 and System 2 in a manner consistent with good air pollution control practices, in violation of 40 C.F.R. §§ 63.4(a)(1), 63.342(a), and 63.342(f)(1)(i).

Environmental Impact of Violations

28. Subparts N violations can result in excess chromium emissions that may cause serious health effects, such as birth defects and cancer, and harmful environmental and ecological effects.

Date

7/28/15

George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-15-OH-19, by Certified Mail, Return Receipt Requested, to:

Julie Lowry
Environmental, Health, and Safety Director
The Electrolizing Corporation of Ohio
1325 East 152nd Street
Cleveland. Ohio 44112

I also certify that I sent copies of the Finding of Violation by first class mail to:

George Baker Commissioner of Air Quality City of Cleveland Department of Public Health 75 Erieview Plaza Cleveland, Ohio 44114-1839

On the 29th day of July 2015.

Loretta Shaffer
Program Technician
AECAB, PAS

Certified Mail Receipt Number: 7009 1680 0000 7644 3456